DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006509 Address: 333 Burma Road **Date Inspected:** 18-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Guo Yan Fei **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG and Tower

Summary of Items Observed:

Summary of Items Observed: On this date Caltrans OSM Quality Assurance (QA) Inspector, Larry Viars was present during the times noted above for observations relative to the work being performed.

Bay 6-

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Side edge and bottom plates, SP686A-001, EP139-001, EP158-001, EP160-001 and BP201-009. The weld identification numbers were as follows: SP686-001-001, 002, EP139-001-001, 002, EP158-001-001, 002, EP160-001-018 and BP201-009-001 and 002.

Bay 9-

Gantry 2 / PMT 1

The Caltrans QA Inspector monitored the OBG Production Monitoring Test (PMT) for Deck Panels DP103-001 (11AW) and 350-002 (11EE). The Caltrans QA inspector recorded amperage, voltage and travel speed of the Gas metal Arc Welding (GMAW) root pass and the Submerged Arc Welding (SAW) cover pass. A Visual inspection of the fit up, tack welds, root pass and cover pass was performed by ZPMC QC Guo Yan Fei, American Bridge Flour (ABF) QC Lv Yun and the Caltrans QA. The Caltrans QA observed ZPMC QC Xue Hai Rong perform Ultrasonic testing of the Partial Joint Penetration weld for depth of penetration. Mr. Xue found the depth of

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

penetration of the PMT welds to be in compliance with contract documents. The Caltrans QA inspector designated locations for Macroetch samples (15 locations). Macroetch samples were evaluated with a 7x optical comparator and accepted by ZPMC QC, ABF QC and the Caltrans QA Inspector.

ZPMC initial MT of Production panel tack welds:

DP350-001: 45 indications found on tack welds. DP103-001: 56 indications found on tack welds.

ZPMC personnel excavated the indications found. ZPMC personnel performed MT of the exaction areas and accepted them prior to the production monitoring test.

Bay 10-

This QA inspector performed Ultrasonic Testing (UT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as NDS1-FASA3- 1 E/E. The weld identification number is as follows: 021, 024 and 028.

ZPMC personnel excavated the indications found. ZPMC personnel performed MT of the exaction areas and accepted them prior to the production monitoring test.

Summary of Conversations:

Only general conversations between QC and QA this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150 0042 2372, who represents the Office of Structural Materials for your project.

| Inspected By: | Viars, Larry | Quality Assurance Inspector |
|---------------|-----------------|-----------------------------|
| Reviewed By: | Carreon, Albert | QA Reviewer |